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List of Exhibits

### 1 Introduction

The purpose of this document is to introduce representatives from state beach programs to the PRogram tracking, beach Advisories, Water quality standards, and Nutrients (PRAWN) database. All state beach program and notification (advisory and closing) data will be stored in PRAWN. In particular, this guide is intended for officials from State beach programs, the EPA's Beaches program, and any database administrators in charge of the state database.

The document can be used to explain the following about beach data submissions to EPA:

- How To Submit Data—explanation on how data is transferred from the originator (in most cases State Beach programs) to the EPA. Two scenarios are explained—data transfer through EPA's Central Data exchange (CDX), and manual data transfer through an EPA official. Details about the transfers are separated into a third section for a more technical audience.
- How to Understand the XML Submission—explanation of the data that needs to be submitted to EPA and how that data should be formed within the XML document. Each section of the XML schema is explained in detail, and a specific section is devoted to explaining the use of the effective date and status indicator elements.
- How to Decode the Error Messages—explanation of the errors that the PRAWN database will produce due to logic and/or technical errors in the path between the creation of the XML document and the loading of data into PRAWN.

### 2 How To Submit Data

States that need to submit Beach information to EPA have two options—they can take advantage of EPA's Central Data exchange (CDX) initiative to submit their data through a set of web pages, or they can submit their data manually by emailing a file to EPA.

#### 2.1 Submit Data Via CDX

The Central Data eXchange (CDX) is an Office of Environmental Information (OEI) initiative to provide a single point of entry for incoming data into EPA. CDX will maintain a set of web pages where, once registered, States can log in and upload data files to EPA.

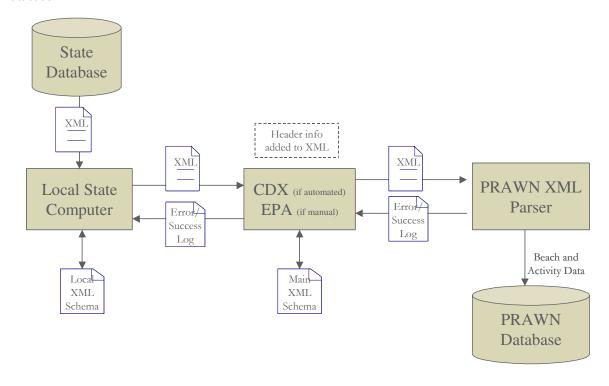
The diagram on Page 2-2 (Exhibit 2.1) describes how data can be submitted from a State database to EPA's PRAWN database via CDX. In addition, the following table describes the steps involved in the process:

State Steps	CDX Automated Steps	PRAWN Automated Steps
Register with CDX via CDX's registration pages.		
2. Create an XML document containing the appropriate data (see Chapter 3.1 Elements in the XML Schema and XML Files for the data to be included) using a local copy of the schema.		
3. Upload the XML document from a local State computer to CDX via CDX's web site.		
	4. Archive the file and validate the XML document against the schema. If errors are found, send a CDX error log to the State user; otherwise, skip to Step 6.	
5. If a CDX error log is received, go back to Step 2 and fix the errors.		
	6. Once the XML document passes validation, add the header information and transfer the XML document to the PRAWN XML Parser.	

State Steps	CDX Automated Steps	PRAWN Automated Steps
		7. Validate the XML document against the business rules. If errors are found, create an error log to CDX; otherwise, skip to Step 10.
	8. If a PRAWN error log is created, pass it along to the State.	
9. If a PRAWN error log is received, go back to Step 2 and fix the errors.		
		10. When the XML file is received that passes the business rules, parse the data into the database and create a success log.
	11. If a PRAWN success log is created, pass it along to the State.	

#### Exhibit 2-1 Data Transfer Diagram

Begin on the upper left side, labeled "State Database", and follow the flow of arrows through the "PRAWN Database".



### 2.2 Submit Data Manually

If for some reason a State cannot access CDX, a user may submit data manually to EPA. The previous diagram on Page 2-2 (Exhibit 2.1) also describes how data can be submitted from a State database to EPA's PRAWN database via EPA. The following table describes the steps involved in this process:

State Steps	EPA Manual Steps	PRAWN Automated Steps
1. Notify the appropriate EPA official that a file needs to be submitted.		
2. Create an XML document containing the appropriate data (see Chapter 3.1 Elements in the XML Schema and XML Files for the data to be included) using a local copy of the schema.		
3. Email the XML document from a local State computer to the appropriate EPA official.		
	4. Archive the file and validate the XML document against the schema. If errors are found, send an error log to the State user; otherwise, skip to Step 6.	
5. If an error log is received, go back to Step 2 and fix the errors.		
	6. Once the XML document passes validation, add the header information and transfer the XML document to the PRAWN XML Parser via FTP.	
		7. Validate the XML document against the business rules. If errors are found, create an error log to CDX; otherwise, skip to Step 10.
	8. If a PRAWN error log is created, FTP it back to an EPA archive and pass it along to the State.	
9. If a PRAWN error log is received, go back to Step 2 and fix the errors.		
		10. When the XML file is received that passes the business rules, parse the data into the database and create a success log.

State Steps	EPA Manual Steps	PRAWN Automated Steps
	11. If a PRAWN success log is created, FTP it back to an EPA archive and pass it along to the State.	

### 2.3 Detailed XML Processing Notes

The following technical notes support the processes described in the previous two sections of this chapter:

- Empty tags such as <OrganizationCode></OrganizationCode> or <OrganizationCode/> will not be accepted.
- If the XML submission passes the validation routine, information about the submission will be inserted into the following four XML tags: SubmissionIdentifier, SubmittingAgencyIdentifier, SubmittingUserIdentifier, and SubmissionDate. These four tags are enclosed in tags labeled HeaderInformation. The HeaderInformation tag must appear before any other data in the file other than the BeachDataSubmission tag.
- When the file is copied to the PRAWN application server, the XML File Detection Script, a BASH script running on the server, detects the new XML files and begins the Beaches Load Routine (written in PL/SQL). The load routine utilizes Oracle's built in Java and XML support capabilities.
- When the XML load process is complete, any errors will be written to an error file with the same name, only a .log extension will appear instead of the .xml extension.
- A UNIX user account, setup for PRAWN, owns the XML File Detection Script. It connects to the PRAWN schema through an externally identified Oracle account. This account, which may be the PRAWN schema owner, will have SELECT, UPDATE, INSERT, and DELETE privileges for the PRAWN tables.
- The PRAWN schema is present on the Intranet version of the WATERS database. To access the data via a public application (which will be developed in the future), the PRAWN schema on the Intranet will be replicated into the Internet WATERS instance, with only "SELECT" privileges granted to Oracle accounts with access to the schema.

# 3 How to Understand the XML Submission

This chapter describes the XML data files and the associated XML schema to be used for the PRAWN database.

#### 3.1 Elements in the XML Schema and XML Files

The XML schema for the data submissions to PRAWN provides a template for the XML files to be submitted. This schema describes the data elements to be included in the XML document and is used to validate it as well. Files are accepted or rejected based on their conformity to the schema.

A graphical version of this schema is provided in Appendix A and an example XML document is provided in Appendix B of this document. Please refer to these appendices when creating an XML document.

This section contains descriptions of the data elements in the PRAWN XML Schema. For each table in the following sections, the following information is provided:

- Data Element: The name of the data element stored in the XML data file.
- XML Tag Name: The XML key associated with the data element.
- XML Data Type: The XML data type for this element.
- Length: The maximum length for the data element for character and numeric datatypes.
- Req'd (Y/N): This value indicates if the column is required in the XML data file. Please note that empty tags such as <OrganizationCode></OrganizationCode> or <OrganizationCode/> will not be accepted when the element is not required.
- Comments: Additional comments related to the XML data element.

For questions on the conventions and formats used in the schema, reference the EPA XML Design Rules and Conventions (March 2002).

#### 3.1.1 Header Information

The header information section of the XML file contains information regarding the data submission, such as submission date, submitting user, and submitting agency. These keys should not be included in the XML file submitted by the submitting agency. Instead, once an XML file has been successfully submitted to CDX, these XML keys will be added to the file by the CDX web application.

All XML elements in this section are located in the following position on the XML element hierarchy—"BeachDataSubmission/HeaderDetail/".

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Comment
Submitting Agency Identifier	SubmittingAgencyIdentifier	STRING	Υ	12	This key will be inserted into the file by the CDX web application.
Example: KYDEP					The list of valid Submitting Agency Identifiers will be maintained as part of the CDX registration process.
Submitting User Identifier	SubmittingUserIdentifier	STRING	Υ	12	This key will be inserted into the file by the CDX web application.
Example: BSMITH					The list of valid Submitting User Identifiers will be maintained as part of the CDX registration process.
Submission Identifier	SubmissionIdentifier	STRING	Υ	12	This key will be inserted into the file by the CDX web application.
Example: 111111111111					This value will uniquely identify each submission and will be generated by the CDX web application.
Submission Date	Submission Date	DATE	Y		This key will be inserted into the file by the CDX web application.
Example: 2003- 01-01T00:00:00					The date should be entered in the XML file in the following format: YYYY-MM-DDTHH:MI:SS

#### 3.1.2 Organization Information

The organization information section of the XML submission contains data related to the organizations involved in the Beach Act Grant Program, such as organization code, organization name, organization description, and contact information. These data elements will be included in the XML file when organization data needs to be added or updated in the PRAWN database.

All XML elements in this section are located in the following position on the XML element hierarchy—"BeachDataSubmission/OrganizationDetail/".

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Comment
Organization Identifier	OrganizationIdentifier	STRING	Y	12	EPA will need to maintain a list of valid Organization Identifiers for all organizations that are stored in the
Example: 987654321098					PRAWN database. These identifiers must be unique, as they will be used to update organization-level data.

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Comment
Organization Transaction Type Code	OrganizationNameDetail/Organizat ionTransactionTypeCode	STRING	Y	4	This value is required if any organization name information is included in the XML data file.
Example: ADD					This value must be set to "EDIT" or "ADD".
					If this value is set to "ADD", a new organization will be inserted into the PRAWN Database with the data in the XML file.
					If this value is set to "EDIT", the Organization Identifier will be used to determine which data should be updated in the PRAWN Database with the data in the XML file.
Organization Type Code	OrganizationNameDetail/OrganizationTypeCode	STRING	Y	12	This value must be set to one of the following:
Example: STATE_AGNCY  Organization Name Example:	OrganizationNameDetail/Organizat ionName	STRING	Y	60	STATE_AGNCY (State Agency) EPA (U.S. EPA) PUB_INT_GRP (Public Interest Group) LOCAL_GOV (Local Government) PRIVATE (Private Company) OW (U.S. EPA Office of Water) OW_DIV (U.S. EPA Office of Water Division) OW_BRANCH (U.S. EPA Office of Water Branch) This value is required if any organization name information is included in the XML data file.  This value is required if any organization name information is included in the XML data file
Kentucky Department for Environmental Protection					
Organization Description Text  Example: Kentucky's DEP	OrganizationNameDetail/OrganizationDescriptionText	STRING	N	255	

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Comment
Organization Abbreviation Text	OrganizationNameDetail/Organizat ionAbbreviationText	STRING	N	30	
Example: KDEP					
Organization Mailing Address	OrganizationMailingAddressDetail/ MailingAddressTypeCode	STRING	Y	12	This value must be set to one of the following:
Type Code					SHIPPING (Shipping Address)
Example:					MAILING (Mailing Address)
MAILING					OTHER (Other Address).
					This value is required if any organization mailing address information is included in the XML data file.
Organization Mailing Address Street Line 1 Text	OrganizationMailingAddressDetail/ MailingAddressStreetLine1Text	STRING	Υ	100	This value is required if any organization mailing address information is included in the XML data file.
Example: 14 Reilly Rd.					
Organization Mailing Address Street Line 2 Text	OrganizationMailingAddressDetail/ MailingAddressStreetLine2Text	STRING	N	100	
Example: Suite 4					
Organization Mailing Address Street Line 3 Text	OrganizationMailingAddressDetail/ MailingAddressStreetLine3Text	STRING	N	100	
Example: Building 12					
Organization Mailing Address City Text	OrganizationMailingAddressDetail/ MailingAddressCityText	STRING	Y	50	This value is required if any organization mailing address information is included in the XML data file.
Example: Frankfort					
Organization Mailing Address State Code	OrganizationMailingAddressDetail/ MailingAddressStateCode	STRING	Y	2	This value is required if any organization mailing address information is included in the XML data file.
Example: KY					This value must be a valid 2-character State Postal Code.

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Comment
Organization Mailing Address Zip Code	OrganizationMailingAddressDetail/ MailingAddressZipCode	STRING	Y	12	This value is required if any organization mailing address information is included in the XML data file.
Example: 40601					This value must be in one of the following numeric formats:
					####
					####-###
Organization Mailing Address Effective Date	OrganizationMailingAddressDetail/ MailingAddressEffectiveDate	DATE	Y		This value is required if any organization mailing address information is included in the XML data file.
Example: 2003-01- 01T00:00:00					The date should be entered in the XML file in the following format: YYYY-MM-DDTHH:MI:SS
					This value should be set to the date on which the mailing address information became effective or will become effective.
					Please see Section 3.2—Use of Effective Date and Status Indicator Data Elements for more information.
Organization Mailing Address Status Indicator	OrganizationMailingAddressDetail/ MailingAddressStatusIndicator	STRING	Υ	8	This value is required if any organization mailing address information is included in the XML data file.
Example: ACTIVE					This value must be set to "ACTIVE" or "INACTIVE".
					Please see Section 3.2—Use of Effective Date and Status Indicator Data Elements for more information.
Organization Electronic	OrganizationElectronicAddressDeta il/ElectronicAddressTypeCode	STRING	Y	12	This value must be set to one of the following:
Address Type Code					EMAIL (E-mail)
					URL (URL)
Example: URL					OTHER (Other)
					This value is required if any organization electronic address information is included in the XML data file.
Organization Electronic Address Text	OrganizationElectronicAddressDeta il/ElectronicAddressText	STRING	Y	255	This value is required if any organization electronic address information is included in the XML data file.
Example: http://www.environ ment.ky.gov/nrepc/ dep/dep2.htm					

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Comment
Organization Electronic Address Effective	OrganizationElectronicAddressDeta il/ElectronicAddressEffectiveDate	DATE	Y		This value is required if any organization electronic address information is included in the XML data file.
Date  Example: 2003-01- 01T00:00:00					The date should be entered in the XML file in the following format: YYYY-MM-DDTHH:MI:SS
01100.00.00					This value should be set to the date on which the electronic address information became effective or will become effective.
					Please see Section 3.2—Use of Effective Date and Status Indicator Data Elements for more information.
Organization Electronic Address Status	OrganizationElectronicAddressDeta il/ElectronicAddressStatusIndicator	STRING	Υ	8	This value is required if any organization electronic address information is included in the XML data file.
Indicator  Example: ACTIVE					This value must be set to "ACTIVE" or "INACTIVE".
,					Please see Section 3.2—Use of Effective Date and Status Indicator Data Elements for more information.
Organization Telephone Type	OrganizationTelephoneDetail/Telep honeTypeCode	STRING	Y	12	This value must be set to one of the following:
Code					FAX (Fax)
Example: VOICE					VOICE (Voice)
					PAGER (Pager)
					CELL (Cellular/Mobile)
					OTHER (Other)
					This value is required if any organization telephone information is included in the XML data file.
Organization Telephone Number	OrganizationTelephoneDetail/Telep honeNumber	STRING	Y	12	This value is required if any organization telephone information is included in the XML data file.
Example: 502-564-					This value must be in the following alphanumeric format:
2130					XXX-XXX-XXXX

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Comment
Organization Telephone Effective Date	OrganizationTelephoneDetail/Effect iveDate	DATE	Y		This value is required if any organization telephone information is included in the XML data file.
Example: 2003-01- 01T00:00:00					The date should be entered in the XML file in the following format: YYYY-MM-DD <b>T</b> HH:MI:SS
					This value should be set to the date on which the telephone information became effective or will become effective.
					Please see Section 3.2—Use of Effective Date and Status Indicator Data Elements for more information.
Organization Telephone Status Indicator	OrganizationTelephoneDetail/Statu sIndicator	STRING	Y	8	This value is required if any organization telephone information is included in the XML data file.
Example: ACTIVE					This value must be set to "ACTIVE" or "INACTIVE".
					Please see Section 3.2—Use of Effective Date and Status Indicator Data Elements for more information.

#### 3.1.3 Person Information

The person information section of the XML submission contains data related to the people associated with the beaches overseen by the National Beach Watch Program, such as person identifier code, name, title, and contact information. These data elements will be included in the XML file when person data needs to be added or updated in the PRAWN database. In the XML schema, each person is affiliated with exactly one organization.

All XML elements in this section are located in the following position on the XML element hierarchy—"BeachDataSubmission/OrganizationDetail/OrganizationPersonDetail/".

Data Element	XML Tag Name	XML Data	Req'd (Y/N)	Length	Comment
		Туре			

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Comment
Person Identifier Example: 123456789012	PersonIdentifier	STRING	Y	12	Submitting organizations will need to maintain a list of valid Person Identifiers for all people that are stored in the PRAWN database. These identifiers must be unique within each organization, as they will used to update organization-level data. (For example, with an organization there can only be 1 person identified as "123", but there could be another person identified as "123" in another organization.)
Person Transaction Type Code Example: ADD	PersonNameDetail/PersonTransa ctionTypeCode	STRING	Υ	4	This value if required if any person name information is included in the XML data file.  This value must be set to "EDIT" or
					"ADD".  If this value is set to "ADD", a new person will be inserted into the PRAWN Database with the data in the XML file.
					If this value is set to "EDIT", the Person Identifier will be used to determine which data should be updated in the PRAWN Database with the data in the XML file.
Person Status Indicator	PersonNameDetail/PersonStatus Indicator	STRING	Y	8	This value if required if any person name information is included in the XML data file.
Example: ACTIVE					This value must be set to "ACTIVE" or "INACTIVE".
Person First Name Example: Bob	PersonNameDetail/PersonFirstNa me	STRING	Y	50	This value if required if any person name information is included in the XML data file.
Ехитріє. Воо					
Person Last Name	PersonNameDetail/PersonLastNa me	STRING	Υ	50	This value if required if any person name information is included in the XML data
Example: Smith					file.
Person Middle Initial	PersonNameDetail/PersonMiddle Initial	STRING	N	2	
Example: S					
Person Suffix  Example: Jr.	PersonNameDetail/PersonSuffix	STRING	N	5	

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Comment
Person Title  Example: Mr.	PersonNameDetail/PersonTitle	STRING	N	60	
Person Mailing Address Type Code Example: SHIPPING	PersonMailingAddressDetail/Maili ngAddressTypeCode	STRING	Υ	12	This value must be set to one of the following:  SHIPPING (Shipping Address)  MAILING (Mailing Address)  OTHER (Other Address)  This value is required if any person mailing address information is included in the XML data file.
Person Mailing Address Street Line 1 Text Example: 14 Reilly Rd.	PersonMailingAddressDetail/Maili ngAddressStreetLine1Text	STRING	Y	100	This value is required if any person mailing address information is included in the XML data file.
Person Mailing Address Street Line 2 Text Example: Suite 4	PersonMailingAddressDetail/Maili ngAddressStreetLine2Text	STRING	N	100	
Person Mailing Address Street Line 3 Text Example: Building 12	PersonMailingAddressDetail/Maili ngAddressStreetLine3Text	STRING	N	100	
Person Mailing Address City Text Example: Frankfort	PersonMailingAddressDetail/Maili ngAddressCityText	STRING	Y	50	This value is required if any person mailing address information is included in the XML data file.
Person Mailing Address State Code Example: KY	PersonMailingAddressDetail/Maili ngAddressStateCode	STRING	Y	2	This value is required if any person mailing address information is included in the XML data file.  This value must be a valid 2-character State Postal Code.

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Comment
Person Mailing Address Zip Code	PersonMailingAddressDetail/Maili ngAddressZipCode	STRING	Y	12	This value is required if any person mailing address information is included in the XML data file.
Example: 40601					This value must be in one of the following numeric formats:
					#####
					#########
Person Mailing Address Effective Date	PersonMailingAddressDetail/Maili ngAddressEffectiveDate	DATE	Y		This value is required if any person mailing address information is included in the XML data file.
Example: 2003-01- 01T00:00:00					The date should be entered in the XML file in the following format: YYYY-MM-DDTHH:MI:SS
					This value should be set to the date on which the mailing address information became effective or will become effective.
					Please see Section 3.2—Use of Effective Date and Status Indicator Data Elements for more information.
Person Mailing Address Status Indicator	PersonMailingAddressDetail/MailingAddressStatusIndicator	STRING	Υ	8	This value is required if any person mailing address information is included in the XML data file.
Example: ACTIVE					This value must be set to "ACTIVE" or "INACTIVE".
					Please see Section 3.2—Use of Effective Date and Status Indicator Data Elements for more information.
Person Electronic Address Type	PersonElectronicAddressDetail/El ectronicAddressTypeCode	STRING	Y	12	This value must be set to one of the following:
Code					EMAIL (E-mail)
Example: EMAIL					URL (URL)
					OTHER (Other)
					This value is required if any person electronic address information is included in the XML data file.
Person Electronic Address Text Example: Smith.Bob@ky.gov	PersonElectronicAddressDetail/El ectronicAddressText	STRING	Y	255	This value is required if any person electronic address information is included in the XML data file.

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Comment
Person Electronic Address Effective Date	PersonElectronicAddressDetail/El ectronicAddressEffectiveDate	DATE	Y		This value is required if any person electronic address information is included in the XML data file.
Example: 2003-01- 01T00:00:00					The date should be entered in the XML file in the following format: YYYY-MM-DD <b>T</b> HH:MI:SS
					This value should be set to the date on which the electronic address information became effective or will become effective.
					Please see Section 3.2—Use of Effective Date and Status Indicator Data Elements for more information.
Person Electronic Address Status Indicator	PersonElectronicAddressDetail/El ectronicAddressStatusIndicator	STRING	Y	8	This value is required if any person electronic address information is included in the XML data file.
Example: ACTIVE					This value must be set to "ACTIVE" or "INACTIVE".
					Please see Section 3.2—Use of Effective Date and Status Indicator Data Elements for more information.
Person Telephone Type	PersonTelephoneDetail/TelephoneTypeCode	STRING	Υ	12	This value must be set to one of the following:
Code					FAX (Fax)
Example: CELL					VOICE (Voice)
					PAGER (Pager)
					CELL (Cellular/Mobile)
					OTHER (Other)
					This value is required if any person telephone information is included in the XML data file.
Person Telephone Number	PersonTelephoneDetail/Telephon eNumber	STRING	Y	12	This value is required if any person telephone information is included in the XML data file.
Example: 502-564-					This value must be in the following alphanumeric format:
1111					XXX-XXX-XXXX

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Comment
Person Telephone Effective Date	PersonTelephoneDetail/Effective Date	DATE	Y		This value is required if any person telephone information is included in the XML data file.
Example: 2003-01- 01T00:00:00					The date should be entered in the XML file in the following format: YYYY-MM-DD <b>T</b> HH:MI:SS
					This value should be set to the date on which the telephone information became effective or will become effective.
					Please see Section 3.2—Use of Effective Date and Status Indicator Data Elements for more information.
Person Telephone Status Indicator	PersonTelephoneDetail/StatusIn dicator	STRING	Y	8	This value is required if any person telephone information is included in the XML data file.
Example: ACTIVE					This value must be set to "ACTIVE" or "INACTIVE".
					Please see Section 3.2—Use of Effective Date and Status Indicator Data Elements for more information.

#### 3.1.4 Beach Information

The beach information section of the XML submission contains data related to the beaches overseen by the National Beach Watch Program, such as beach name, beach description, state code, and county name. These data elements will be included in the XML file when beach information needs to be added or updated in the PRAWN database.

All XML elements in this section are located in the following position on the XML element hierarchy—"BeachDataSubmission/BeachDetail/".

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Comment
Beach Identifier  Example:  KY234898	BeachIdentifier	STRING	Y	8	EPA maintains a list of valid Beach Identifiers for all beaches that are stored in the PRAWN database. These identifiers must be unique, as they will used to update beach or program interest-level data.

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Comment
Beach Transaction Type Code	BeachNameDetail/BeachTransactio nTypeCode	STRING	Υ	4	This value is required if any beach name information is included in the XML data file.
Example: ADD					This value must be set to "EDIT" or "ADD".
					If this value is set to "ADD", a new beach will be inserted into the PRAWN Database with the data in the XML file.
					If this value is set to "EDIT", the Beach Identifier will be used to determine which data should be updated in the PRAWN Database with the data in the XML file.
Beach Name	BeachNameDetail/ProgramInterest	STRING	Υ	60	This value is required if any beach name
Example: Sandy Beach Point	Name				information is included in the XML data file.
Beach Description Text	BeachNameDetail/ProgramInterest DescriptionText	STRING	Υ	255	This value is required if any beach name information is included in the XML data
Example: Rocky,					file.
big waves, no pollution					
Beach Comment Text	BeachNameDetail/ProgramInterest CommentText	STRING	N	255	
Example: A nice					
place to surf					
Beach State Code	BeachNameDetail/ProgramInterest StateCode	STRING	Υ	2	This value is required if any beach name information is included in the XML data
Example: KY					file. This value must be a valid 2-character
					State Postal Code.
Beach County Name	BeachNameDetail/ProgramInterest CountyName	STRING	N	60	
Example: Mill					

#### **3.1.5** Beach Activity Information

The beach activity section of the XML submission contains data related to beach advisories and closures, such as activity type code, activity name, activity description text, and activity reason. These data elements will be included in the XML file when activity or closure information needs to be added to the PRAWN database. Beach activity information can only be added to the PRAWN database; it cannot be updated.

All XML elements in this section are located in the following position on the XML element hierarchy—"BeachDataSubmission/BeachDetail/BeachActivityDetail/".

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Comment
Activity Type Code  Example: CLOSURE	ActivityTypeCode	STRING	Y	12	This value must be set to one of the following:  CONTAM_ADV (Contamination Advisory)  CLOSURE (Closure)  MEETING (Meeting)  MONITOR (Monitoring)  PROG_EST (Program Establishment)  SURVEY (Survey)  PERM_CLOSURE (Permanent Closure)  RAIN_ADV (Rain Advisory)  GRANT_ACT (Grant Activity)  This value is required if any beach activity information is included in the XML data file.
Activity Name Example: Closure 34	ActivityName	STRING	Y	60	This value is required if any beach activity information is included in the XML data file.
Activity Actual Start Date Example: 2002-04- 12T02:00:00	ActivityActualStartDate	DATE	Y		This value is required if any beach activity information is included in the XML data file.  The date should be entered in the XML file in the following format: YYYY-MM-DDTHH:MI:SS
Activity Actual Stop Date Example: 2002-04- 16T06:30:00	ActivityActualStopDate	DATE	N		The date should be entered in the XML file in the following format: YYYY-MM-DDTHH:MI:SS
Activity Description Text  Example: The lifeguards closed the beach	ActivityDescriptionText	STRING	N	255	

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Comment
Activity Comment Text	ActivityCommentText	STRING	N	255	
Example: The police were not present					
Activity Reason Name	ActivityReasonDetail/ActivityReas onName	STRING	Y	60	This value is required only if beach activity information AND beach activity
Example: Elevated bacteria					reason information is included in the XML data file.
Activity Reason Description Text	ActivityReasonDetail/ActivityReas onDescriptionText	STRING	Υ	255	This value is required only if beach activity information AND beach activity
Example: 227 ppm					reason information is included in the XML data file.
Activity Start Measure	ActivityExtentDetail/ActivityStart Measure	NUMBER	N	14	This value is the numeric equivalent of the location or mile marker where the
Example: 2					length of affected beach begins. The activity extent length (below) is added to the activity start measure to understand the exact extent of beach that was affected by the activity.
					For example, a start measure of 2 with an extent length of 5 and a unit of measure code of mi means the activity affected the beach from mile marker 2 to mile marker 7.
Activity Extent Length Measure	ActivityExtentDetail/ActivityExten tLengthMeasure	NUMBER	Y	14	This value is required only if any beach activity information AND any beach
Example: 5					activity extent information is included in the XML data file.
					See Activity Start Measure (above) for an explanation of the use of this value.
Activity Unit of Measure Code  Example: mi	ActivityExtentDetail/Activity Unit of Measure Code	STRING	Y	12	This value is required only if any beach activity information AND any beach activity extent information is included in the XML data file.
					A user may submit any 12 characters to represent the Unit Code.

#### 3.1.6 Beach Role Information

The beach role section of the XML submission contains data related to roles performed by organizations and persons for specific beaches. This section includes data elements, such as beach role type code,

organization identifier, and person identifier. These data elements will be included in the XML file when beach role information needs to be added or updated in the PRAWN database.

All XML elements in this section are located in the following position on the XML element hierarchy—"BeachDataSubmission/BeachDetail/BeachRoleDetail/".

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Comment
Beach Role Type Code Example: ANALYZER	XML Tag Name  BeachRoleTypeCode		•	Length 12	For beach/organization assignments, this value must be set to one of the following:  CONTRACTOR (Contractor)  SUBCONTRACT (Subcontractor)  RESPONDENT (Respondent)  LOCAL_AGENCY (Lead Local Agency)  STATE_AGENCY (Lead State Agency)  DETERM_AUTH (Determination     Authority)  ISSUAN_AUTH (Issuance Authority)  REOPEN_AUTH (Reopening Authority)  LAB (Laboratory)  COLLECTOR (Sample Collector)  ANALYZER (Sample Analyzer)  OTHER (Other)  UNKNOWN (Unknown)  For beach/person assignments, this value must be set to one of the following:  STATE (Lead State Contact)  LOCAL (Lead Local Contact)  COLLECTOR (Sample Analyzer)  RESPONDENT (Respondent)  TECHNICAL (Technical Contact)  PUBLIC (Public Contact)  DETERM_AUTH (Determination     Authority)  ISSUAN_AUTH (Issuance Authority)
					REOPEN_AUTH (Reopening Authority) INFO_TECH (Information Technology Authority) This value is required if any beach role information is included in the XML data file.

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Comment
Beach Role Organization Identifier	BeachRoleOrganizationIdentifier	STRING	Y	12	This value must correspond to a valid Organization Identifier in the XML file or in the PRAWN database.
Example: 987654321098					
Beach Role Person Identifier	BeachRolePersonIdentifier	STRING	N	12	This value must correspond to a valid Person Identifier in the XML file or in
Example: 123456789012					the PRAWN database.
Beach Role Effective Date	BeachRoleEffectiveDate	DATE	Y		This value is required if any beach role information is included in the XML data file.
Example: 2003-01- 01T00:00:00					The date should be entered in the XML file in the following format: YYYY-MM-DDTHH:MI:SS
					This value should be set to the date on which the beach role information became effective or will become effective.
					Please see Section 3.2—Use of Effective Date and Status Indicator Data Elements for more information.
Beach Role Status Indicator	BeachRoleStatusIndicator	STRING	Y	8	This value is required if any beach role information is included in the XML data file.
Example: ACTIVE					This value must be set to "ACTIVE" or "INACTIVE".
					Please see Section 3.2—Use of Effective Date and Status Indicator Data Elements for more information.

#### 3.1.7 Beach Procedure Information

The beach procedure section of the XML submission contains data related to procedures used by beaches for monitoring, notification, issuance, and reopening. This section includes data elements, such as procedure type code, procedure description text, and procedure identifier. These data elements will be included in the XML file when beach procedure information needs to be added or updated in the PRAWN database.

All XML elements in this section are located in the following position on the XML element hierarchy—"BeachDataSubmission/BeachDetail/BeachProcedureDetail/".

Data Element	XML Tag Name	XML Data Type	Req'd (Y/N)	Length	Comment
Procedure Type Code Example:	ProcedureTypeCode	STRING	Y	12	This value must be a set to a valid procedure type code. See Appendix C Procedure Type Codes for a list of valid codes.
IA_RADIO					This value is required if any beach procedure information is included in the XML data file.
Procedure Description Text	ProcedureDescriptionText	STRING	Y	255	This value is required if any beach procedure information is included in the XML data file.
Example: Announce the advisory on the local radio station					the AML data file.
Procedure Identifier <i>Example:</i> 675849302019	ProcedureIdentifier	STRING	Y	12	Submitting organizations will need to maintain a list of valid Procedure Identifiers for all procedures that are stored in the PRAWN database. These identifiers must be unique within each organization, as they will used to update organization-level data. (For example, with an organization there can only be 1 procedure identified as "AB123", but there could be another procedure identified as "AB123" in another organization.)
Procedure Transaction Type Code Example: ADD	ProcedureTransactionTypeCode	STRING	Y	4	This value must be set to "EDIT" or "ADD".  If this value is set to "ADD", a new procedure will be inserted into the PRAWN Database with all of the data in
					the XML file.  If this value is set to "EDIT", the data in the XML file will update the Procedure with a matching Procedure Identifier.  Associating more beaches to an
					Associating more beaches to an existing procedure requires this value to be "EDIT".
Procedure Beach Identifier	ProcedureBeachIdentifier	STRING	Y	12	This value must correspond to a valid Beach/Program Interest Identifier in the XML file or in the PRAWN database.
Example: KY234898					Any number of ProcedureBeachIdentifiers may be submitted (consecutively in the XML file) to associate many beaches to a single procedure.

#### 3.2 Use of Effective Date and Status Indicator Data Elements

The Effective Date and Status Indicator data elements are to set the effective dates in the PRAWN database for mailing addresses, electronic addresses, telephone numbers, beach/person roles, and beach/organization roles. For each of these types of data, the PRAWN database tracks the Start Date and Stop Date. For example, the database may track that a fax telephone number was valid starting on January 1, 2001. If this telephone number was updated and the new fax number was valid on July 1, 2001, a new record is added in the database with a Start Date of July 1, 2001 and the same date is added as the Stop Date for the previous telephone number.

To set this information correctly, the XML schema uses two data elements—Effective Date and Status Indicator—with mailing address, electronic address, telephone, beach/person role, and beach/organization role data. Furthermore, the user must specify the appropriate Type Code value (e.g., "FAX", VOICE", etc. for telephone number) so that the correct address, telephone number, beach/person role, or beach/organization role is updated.

To update these types of data, these three data elements should be populated as follows:

- To update an address, electronic address, telephone number, beach/person role assignment, or beach/organization assignment with updated data, the Effective Date and Status Indicator fields should be set as follows:
  - Effective Date should be set to the date on which the new address, telephone number, or assignment will become valid.
  - Status Indicator should be set to "ACTIVE".
  - Type Code should be set to the type of information to be updated. (For example, this might be set to "STATE\_AGENCY" for BeachRoleTypeCode.)
  - This will update the Stop Date for the current data and will create a new record with the updated data and the associated Start Date.
- To indicate that an address, electronic address, telephone number, beach/person role assignment, or beach/organization assignment is no longer valid and there is no replacement data, the Effective Date and Status Indicator fields should be set as follows:
  - Effective Date should be set to the date on which the address, telephone number, or assignment will become invalid.
  - Status Indicator should be set to "INACTIVE".
  - Type Code should be set to the type of information to be updated. (For example, this might be set to "SHIPPING" for MailingAddressTypeCode.)
  - This will update the Stop Date for the current data but will not create a new record, since there is no new data.

## 4 How to Decode the Error Messages

This chapter provides detailed information regarding the error messages that may be produced during data transfer. This chapter assumes that the XML submission has passed XML schema validation before being processed by the data loading software.

### 4.1 System Generated Error Messages

This section describes system generated error messages associated with the validation and loading of National Beach Program data to the PRAWN database. The following table details the specific error codes and messages that may be produced during data loading and provides a short description of each error and appropriate corrective actions. It should be noted that, where appropriate, error messages would be followed by XML tag value(s) to describe the location in the XML document where the error occurred. For instance, the error message 'OrganizationName is required for adding/editing an Organization' would be followed by the text '[OrganizationIdentifier = X]' where 'X' is the identifier for the Organization where the error occurred.

All errors encountered during the processing and loading of an XML data submission will be written to an Error Log File that can be sent to CDX and used for reporting feedback to data submitters. In addition to PRAWN system generated errors, Oracle specific error messages will also be written to this file (see Section 4.2 Oracle Generated Error Messages for more information).

Exhibit 4-1 PRAWN Error Messages

Error Message	Description/Corrective Action
OrganizationIdentifier must be unique for adding an Organization to the PRAWN system.	All new Organization records must have a previously unused value for Organization Identifier in the PRAWN system. Confirm that you are using the assigned OrganizationIdentifier.
OrganizationIdentifier not found in the PRAWN system.	You are attempting to edit a record that does not exist. Please confirm that you have entered the correct Organization Identifier for the record you are attempting to edit or change OrganizationTransactionType to add if you wish to create a new Organization record.
OrganizationTypeCode is invalid.	A value unknown to the PRAWN system has been submitted for OrganizationTypeCode. Please see Chapter 2 for a list of valid values.
PersonIdentifier must be unique within an Organization.	All new Person records must have a value for Person Identifier that is previously unused by the referenced Organization in the PRAWN system.
	OrganizationIdentifier must be unique for adding an Organization to the PRAWN system.  OrganizationIdentifier not found in the PRAWN system.  OrganizationTypeCode is invalid.  PersonIdentifier must be unique within

Error Code	Error Message	Description/Corrective Action
BCH-0202	PersonIdentifier not found within the specified Organization.	You are attempting to edit a record that does not exist within the specified Organization. Please confirm that you have entered the correct Person Identifier for the record you are attempting to edit or change PersonTransactionType to add if you wish to create a new Person record.
BCH-0301	MailingAddressTypeCode is invalid.	A value unknown to the PRAWN system has been submitted for MailingAddressTypeCode. Please see Chapter 2 for a list of valid values.
BCH-0302	MailingAddressStateCode is invalid.	MailingAddressStateCode must be a valid 2-digit State Postal Code (such as CA for California). Confirm that you are using a valid state code.
BCH-0303	MailingAddressZipCode is invalid.	Provide a MailingAddressZipCode in one of the following numeric formats:  ##### #############################
BCH-0401	ElectronicAddressTypeCode is invalid.	A value unknown to the PRAWN system has been submitted for ElectronicAddressTypeCode. Please see Chapter 2 for a list of valid values.
BCH-0501	TelephoneNumber is invalid.	Provide a TelephoneNumber in one of the following alphanumeric formats:  XXX-XXX-XXXX
BCH-0502	TelephoneTypeCode is invalid.	A value unknown to the PRAWN system has been submitted for TelephoneTypeCode. Please see Chapter 2 for a list of valid values.
BCH-0601	ProgramInterestStateCode is invalid.	ProgramInterestStateCode must be a valid 2-digit State Postal Code (such as CA for California). Confirm that you are using a valid state code.
BCH-0602	BeachIdentifier must be unique for adding a Beach to the PRAWN system.	All new Beach records must have a previously unused value for Beach Identifier in the PRAWN system. Confirm that you are using the assigned 8-digit BeachIdentifier.
BCH-0603	BeachIdentifier not found in the PRAWN system.	You are attempting to edit a record that does not exist. Please confirm that you have entered the correct Beach Identifier for the record you are attempting to edit or change Beach Transaction Type Code to add if you wish to create a new Beach record.
BCH-0701	ActivityTypeCode is invalid.	A value unknown to the PRAWN system has been submitted for ActivityTypeCode. Please see Appendix B for a list of valid values.
BCH-0801	BeachRoleTypeCode is invalid.	A value unknown to the PRAWN system has been submitted for BeachRoleTypeCode. Please see Chapter 2 for a list of valid values.

Error Code	Error Message	Description/Corrective Action
BCH-0802	BeachRoleOrganizationIdentifier not found in the PRAWN system.	You are attempting to associate a role with an Organization that does not exist in the PRAWN system. Please confirm that you have entered the correct Organization Identifier and that the information for that Organization has been previously submitted and successfully processed by the PRAWN system.
BCH-0803	BeachRolePersonIdentifier not found in the PRAWN system.	You are attempting to associate a role with a person that does not exist in the PRAWN system. Please confirm that you have entered the correct Person Identifier and that the information for that Person has been previously submitted and successfully processed by the PRAWN system.
BCH-0901	ProcedureIdentifier must be unique for adding a Procedure to the PRAWN system.	All new Procedure records must have a value for Procedure Identifier that is previously unused by the referenced Organization in the PRAWN system.  To update an existing Procedure, including assigning more beaches to the Procedure, change the ProcedureTypeCode to 'EDIT'.
BCH-0902	ProcedureIdentifier not found in the PRAWN system.	You are attempting to edit a record that does not exist. Please confirm that you have entered the correct Procedure Identifier for the record you are attempting to edit or change ProcedureTransactionType to add if you wish to create a new Procedure record.
BCH-0903	ProcedureTypeCode is invalid.	A value unknown to the PRAWN system has been submitted for ProcedureTypeCode. Please see Appendix C Procedure Type Codes for a list of valid values.
BCH-0904	ProcedureBeachIdentifier not found in the PRAWN system.	You are attempting to associate a procedure with a beach that does not exist in the PRAWN system. Please confirm that you have entered the correct Beach Identifier and that the information for that Beach has been previously submitted and successfully processed by the PRAWN system.

### 4.2 Oracle Generated Error Messages

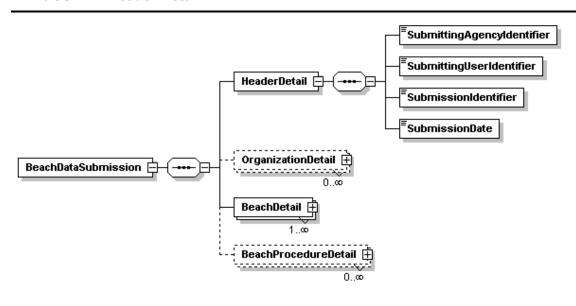
In addition to error messages generated by the PRAWN system, it is also possible that Oracle specific errors may occur during XML processing. These errors would most likely be associated with the administration and maintenance of the Oracle database instance (for example, exceeding the allocated table space size). Oracle specific errors will be captured by the XML data loading software and reported in the Error Log File together with the PRAWN system generated errors (see Section 4.1 System Generated Error Messages). Oracle specific errors will be prefixed with the text 'Oracle Error:' and will contain the error message number and text produced by the Oracle DBMS (database management system) at the time the error occurred.

# 5 Appendix A Schema Graphics

This appendix provides a graphical decomposition of the Beaches XML Schema. The figures that follow offer an expanded view of each of the four sections that comprise a Beach Data Submission (Header Detail, Organization Detail, Beach Detail, and Beach Procedure Detail).

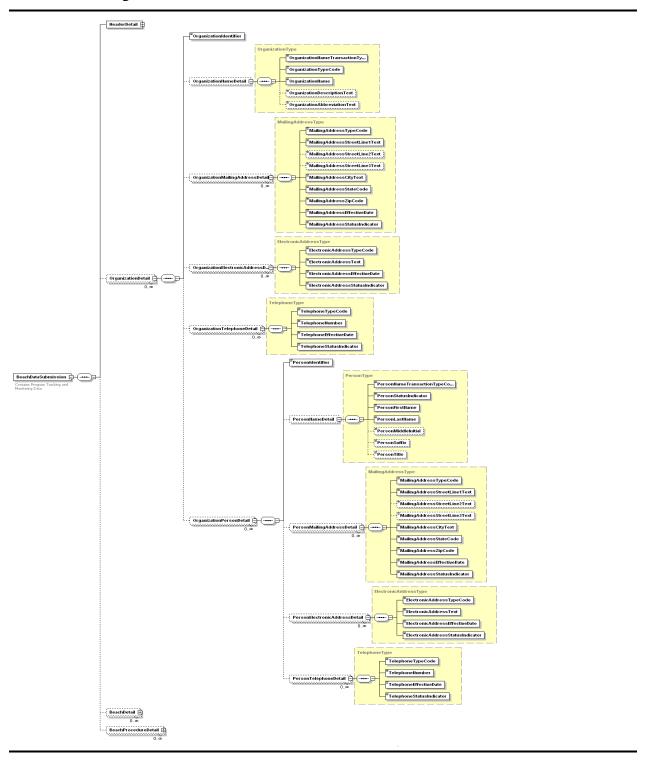
- Dashed lines represented optional elements, solid lines represent mandatory elements.
  - Please note: Empty tags (e.g., <BeachIdentifier></BeachIdentifier>) for optional elements cannot appear in the XML file.
- The figures  $0..\infty$  and  $1..\infty$  mean that the field may be repeated, as long as the repetitions are next to each other, as many times as the user wishes.
  - For example, a user may submit as many BeachDetail sections as necessary in a single file.
- A + sign at the end of the box means more elements exist behind that element.

Exhibit 5-1 Header Detail

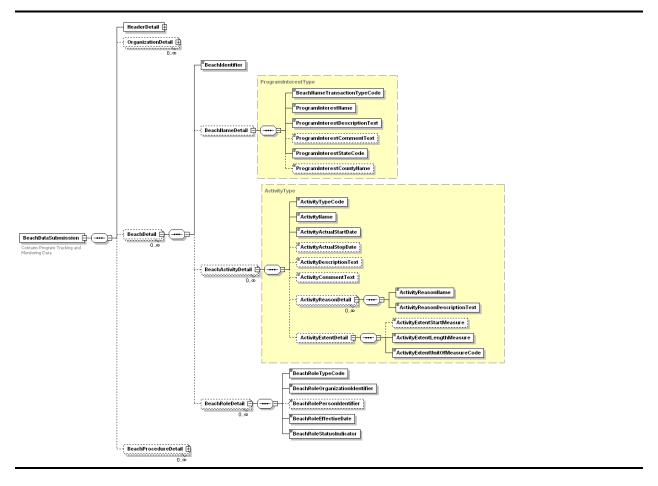


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Exhibit 5-2 Organization Detail

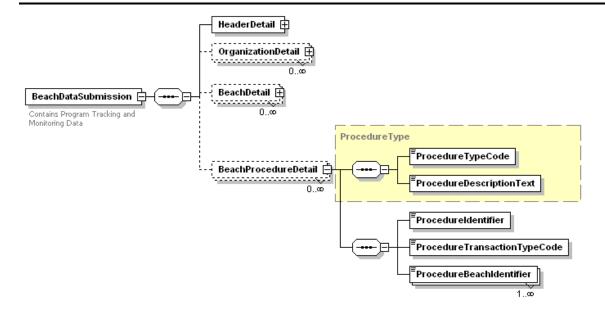


#### Exhibit 5-3 Beach Detail



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#### Exhibit 5-4 Beach Procedure Detail



# 6 Appendix B Example XML File

The following is text from an example XML file that would be sent to PRAWN from a State. The file appears with spacing to provide a more clear view of the data. The spacing is not required or standard.

```
<?xml version="1.0" encoding="UTF-8"?>
<BeachDataSubmission xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="Beaches 10-28 Public.xsd">
       <OrganizationDetail>
              <OrganizationIdentifier>987654321098/OrganizationIdentifier>
              <OrganizationNameDetail>
                     <OrganizationNameTransactionTypeCode>ADD</OrganizationNameTransactionTypeCode>
                     <OrganizationTypeCode>STATE_AGNCY/OrganizationTypeCode>
                     <OrganizationName>Kentucky Department for Environmental Protection</OrganizationName>
                     <OrganizationDescriptionText>Kentucky DEP
                     <OrganizationAbbreviationText>KDEP</OrganizationAbbreviationText>
              </OrganizationNameDetail>
              <OrganizationMailingAddressDetail>
                     <MailingAddressTypeCode>MAILING</MailingAddressTypeCode>
                     <MailingAddressStreetLine1Text>14 Reilly Rd./MailingAddressStreetLine1Text>
                     <MailingAddressStreetLine1Text>Suite 4</MailingAddressStreetLine1Text>
                     <MailingAddressStreetLine1Text>Building 12</MailingAddressStreetLine1Text>
                     <MailingAddressCityText>Frankfort</MailingAddressCityText>
                     <MailingAddressStateCode>KY</MailingAddressStateCode>
                     <MailingAddressZipCode>40601</MailingAddressZipCode>
                     <MailingAddressEffectiveDate>2003-01-01T00:00:00</MailingAddressEffectiveDate>
                     <MailingAddressStatusIndicator>ACTIVE</MailingAddressStatusIndicator>
              </OrganizationMailingAddressDetail>
              <OrganizationElectronicAddressDetail>
                     <ElectronicAddressTypeCode>URL</ElectronicAddressTypeCode>
                     <ElectronicAddressText>http://www.environment.ky.gov</ElectronicAddressText>
                     <ElectronicAddressEffectiveDate>2003-01-01T00:00:00</ElectronicAddressEffectiveDate>
                     <ElectronicAddressStatusIndicator>ACTIVE</ElectronicAddressStatusIndicator>
              </OrganizationElectronicAddressDetail>
              <OrganizationTelephoneDetail>
                     <TelephoneTypeCode>VOICE</TelephoneTypeCode>
                     <TelephoneNumber>502-564-2150</TelephoneNumber>
                     <TelephoneEffectiveDate>2003-01-01T00:00:00</TelephoneEffectiveDate>
                     <TelephoneStatusIndicator>ACTIVE</TelephoneStatusIndicator>
              </OrganizationTelephoneDetail>
              <OrganizationPersonDetail>
```

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<PersonIdentifier>123456789012</PersonIdentifier>

```
<PersonNameTransactionTypeCode>ADD</PersonNameTransactionTypeCode>
                    <PersonStatusIndicator>ACTIVE</PersonStatusIndicator>
                    <PersonFirstName>Bob</PersonFirstName>
                    <PersonLastName>Smith</PersonLastName>
                    <PersonMiddleInitial>S</PersonMiddleInitial>
                    <PersonSuffix>Jr.</PersonSuffix>
                    <PersonTitle>Mr.</PersonTitle>
             </PersonNameDetail>
             <PersonMailingAddressDetail>
                    <MailingAddressTypeCode>SHIPPING</MailingAddressTypeCode>
                    <MailingAddressStreetLine1Text>14 Reilly Rd.
                    <MailingAddressStreetLine1Text>Suite 4</MailingAddressStreetLine1Text>
                    <MailingAddressStreetLine1Text>Building 12</MailingAddressStreetLine1Text>
                    <MailingAddressCityText>Frankfort</MailingAddressCityText>
                    <MailingAddressStateCode>KY</MailingAddressStateCode>
                    <MailingAddressZipCode>40601
                    <MailingAddressEffectiveDate>2003-01-01T00:00:00
                    <MailingAddressStatusIndicator>ACTIVE</MailingAddressStatusIndicator>
             </PersonMailingAddressDetail>
             <PersonElectronicAddressDetail>
                    <ElectronicAddressTypeCode>EMAIL</ElectronicAddressTypeCode>
                    <ElectronicAddressText>Smith.Bob@ky.gov</ElectronicAddressText>
                    <ElectronicAddressEffectiveDate>2003-01-01T00:00:00</ElectronicAddressEffectiveDate>
                    <ElectronicAddressStatusIndicator>ACTIVE</ElectronicAddressStatusIndicator>
             </PersonElectronicAddressDetail>
             <PersonTelephoneDetail>
                    <TelephoneTypeCode>CELL</TelephoneTypeCode>
                    <TelephoneNumber>502-564-1111</TelephoneNumber>
                    <TelephoneEffectiveDate>2003-01-01T00:00:00</TelephoneEffectiveDate>
                    <TelephoneStatusIndicator>ACTIVE</TelephoneStatusIndicator>
             </PersonTelephoneDetail>
      </OrganizationPersonDetail>
</OrganizationDetail>
<BeachDetail>
      <BeachIdentifier>KY234898</BeachIdentifier>
      <BeachNameDetail>
             <BeachNameTransactionTypeCode>ADD</BeachNameTransactionTypeCode>
             <ProgramInterestName>Sandy Beach Point/ProgramInterestName>
             <ProgramInterestDescriptionText>Rocky, big waves, no pollution/ProgramInterestDescriptionText>
             <ProgramInterestCommentText>A nice place to surf/ProgramInterestCommentText>
             <ProgramInterestStateCode>KY</ProgramInterestStateCode>
             <ProgramInterestCountyName>Mill/ProgramInterestCountyName>
      </BeachNameDetail>
      <BeachActivityDetail>
             <ActivityTypeCode>CLOSURE</ActivityTypeCode>
```

<PersonNameDetail>

```
<a href="https://doi.org/10.1016/j.com/">ActivityActualStartDate</a>
                                                    <ActivityActualStopDate>2002-04-16T06:30:00</ActivityActualStopDate>
                                                    <a href="mailto:</a><a href="mailto:ActivityDescriptionText">ActivityDescriptionText</a>>
                                                    <a href="https://document/ext">ActivityCommentText</a> The police were not present</a>/ActivityCommentText>
                                                    <ActivityReasonDetail>
                                                                      <a href="mailto:</a></a></a>CtivityReasonDescriptionText>227 ppm</a>/ActivityReasonDescriptionText>
                                                    </ActivityReasonDetail>
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# 7 Appendix C Procedure Type Codes

Due to the large number of Procedure Type codes, this appendix provides a separate table to explain the acceptable codes. See Section 3.1.7 Beach Procedure Information for a description of when to use these codes in the XML schema.

Code	Name	Description
DA_ASES_RISK	ADVISORY: Assess risk	Assess risks to potential swimmers
DA_ASES_SICK	ADVISORY: Asses sickness	Assess number of complaints of sickness
DA_DIS_AGNCY	ADVISORY: Discuss with agencies	Discuss situation with other agencies
DA_PRECAUTN	ADVISORY: Precautionary	Perform a precautionary closing in response to hazardous discharges
DA_PREEMPTVE	ADVISORY: Preemptive	Compare conditions to preemptive closing criteria
DA_WTR_STAND	ADVISORY: Compare with water standards	Compare bacterial concentrations with water quality standards to determine whether standards are exceeded
DA_W_Q_MONTR	ADVISORY: Water quality monitoring	Perform water quality modeling
DB_ASES_RISK	COMBINED: Assess risk	Assess risks to potential swimmers
DB_ASES_SICK	COMBINED: Asses sickness	Assess number of complaints of sickness
DB_DIS_AGNCY	COMBINED: Discuss with agencies	Discuss situation with other agencies
DB_PRECAUTN	COMBINED: Precautionary	Perform a precautionary closing in response to hazardous discharges
DB_PREEMPTVE	COMBINED: Preemptive	Compare conditions to preemptive closing criteria
DB_WTR_STAND	COMBINED: Compare with water standards	Compare bacterial concentrations with water quality standards to determine whether standards are exceeded

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Code	Name	Description
DB_W_Q_MONTR	COMBINED: Water quality monitoring	Perform water quality modeling
DC_ASES_RISK	CLOSING: Assess risk	Assess risks to potential swimmers
DC_ASES_SICK	CLOSING: Asses sickness	Assess number of complaints of sickness
DC_DIS_AGNCY	CLOSING: Discuss with agencies	Discuss situation with other agencies
DC_PRECAUTN	CLOSING: Precautionary	Perform a precautionary closing in response to hazardous discharges
DC_PREEMPTVE	CLOSING: Preemptive	Compare conditions to preemptive closing criteria
DC_WTR_STAND	CLOSING: Compare with water standards	Compare bacterial concentrations with water quality standards to determine whether standards are exceeded
DC_W_Q_MONTR	CLOSING: Water quality monitoring	Perform water quality modeling
IA_BEACH	ADVISORY: Post at Beach	Post advisory or closing at the beach
IA_DIF_AGNCY	ADVISORY: Different Agency(ies)	Provide announcement to other government agency(ies)
IA_INTERNAL	ADVISORY: Internal Agency	Provide announcement to internal agency staff
IA_INTERNET	ADVISORY: Post on Internet	Post advisory or closing on the Internet
IA_NEWSPAPER	ADVISORY: Newspaper article	Publish advisory or closing in local newspaper
IA_PHONE	ADVISORY: Provide phone line	Provide results on hotline/water quality information/result phone line
IA_PHYS_ISOL	ADVISORY: Physical Isolation	Physically isolate contaminated area (e.g., block access, fence off area)

Code	Name	Description
IA_RADIO	ADVISORY: Radio announcement	Have advisory or closing announced on local radio station
IA_RESP_PRSN	ADVISORY: Notify responsible person	Notify owner/manager/operator/lifeguards of results
IA_TV_ANNCE	ADVISORY: TV announcement	Have advisory or closing announced on local TV station
IB_BEACH	COMBINED: Post at Beach	Post advisory or closing at the beach
IB_DIF_AGNCY	COMBINED: Different Agency(ies)	Provide announcement to other government agency(ies)
IB_INTERNAL	COMBINED: Internal Agency	Provide announcement to internal agency staff
IB_INTERNET	COMBINED: Post on Internet	Post advisory or closing on the Internet
IB_NEWSPAPER	COMBINED: Newspaper article	Publish advisory or closing in local newspaper
IB_PHONE	COMBINED: Provide phone line	Provide results on hotline/water quality information/result phone line
IB_PHYS_ISOL	COMBINED: Physical Isolation	Physically isolate contaminated area (e.g., block access, fence off area)
IB_RADIO	COMBINED: Radio announcement	Have advisory or closing announced on local radio station
IB_RESP_PRSN	COMBINED: Notify responsible person	Notify owner/manager/operator/lifeguards of results
IB_TV_ANNCE	COMBINED: TV announcement	Have advisory or closing announced on local TV station
IC_BEACH	CLOSING: Post at Beach	Post advisory or closing at the beach

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Code	Name	Description
IC_DIF_AGNCY	CLOSING: Different Agency(ies)	Provide announcement to other government agency(ies)
IC_INTERNAL	CLOSING: Internal Agency	Provide announcement to internal agency staff
IC_INTERNET	CLOSING: Post on Internet	Post advisory or closing on the Internet
IC_NEWSPAPER	CLOSING: Newspaper article	Publish advisory or closing in local newspaper
IC_PHONE	CLOSING: Provide phone line	Provide results on hotline/water quality information/result phone line
IC_PHYS_ISOL	CLOSING: Physical Isolation	Physically isolate contaminated area (e.g., block access, fence off area)
IC_RADIO	CLOSING: Radio announcement	Have advisory or closing announced on local radio station
IC_RESP_PRSN	CLOSING: Notify responsible person	Notify owner/manager/operator/lifeguards of results
IC_TV_ANNCE	CLOSING: TV announcement	Have advisory or closing announced on local TV station
MO_BEACH	Post at Beach	Post results at beach
MO_DIF_AGNCY	Different Agency	Provide results to different agency staff for evaluation
MO_INTERNAL	Internal Agency	Provide results to internal agency staff for evaluation
MO_INTERNET	Post on article	Post results on the Internet
MO_NEWSPAPER	Newspaper article	Publish results in local newspaper
MO_ON_REQUST	Provide on request	Provide results to anyone on request
MO_PHONE	Provide phone line	Provide results on hotline/water quality information/results/phone line
MO_RADIO	Radio announcement	Have results announced on local radio station

Code	Name	Description
MO_RESP_PRSN	Notify responsible person	Notify owner/manager/operator/lifeguards of results
MO_TV_ANNCE	TV announcement	Have results announced on local TV station
OT_OTHER	Other	Other
RA_ASES_RISK	ADVISORY: Assess risks	Assess risks to potential swimmers
RA_ASES_SICK	ADVISORY: Assess sickness	Assess number of complaints of sickness
RA_BEACH	ADVISORY: Post at beach	Post announcement at the beach
RA_DIF_AGNCY	ADVISORY: Discuss with agencies	Discuss situation with other agencies
RA_INTERNAL	ADVISORY: Agency	Provide announcement to agency staff
RA_INTERNET	ADVISORY: Post on Internet	Post reopening on the Internet
RA_LOCAL_GOV	ADVISORY: Local government	Provide announcement to local government staff
RA_NEWSPAPER	ADVISORY: Newspaper article	Publish reopening in local newspaper
RA_PHONE	ADVISORY: Provide phone line	Provide results on hotline/water quality information/result phone line
RA_PHYS_ISOL	ADVISORY: Remove physical isolation	Remove physical barriers set when closed
RA_RADIO	ADVISORY: Radio announcement	Have reopening announced on local radio station
RA_RESAMPLE	ADVISORY: Resample	Resample and compare bacterial concentrations with water quality standards to determine whether levels are below

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Code	Name	Description
RA_RESP_PRSN	ADVISORY: Notify responsible person	Notify owner/manager/operator/lifeguards of results
RA_STD_RAIN	ADVISORY: Standard rain reopening	Reopen after a set number of days following rainfall
RA_TV_ANNCE	ADVISORY: TV announcement	Have reopening announced on local TV station
RB_ASES_RISK	COMBINED: Assess risks	Assess risks to potential swimmers
RB_ASES_SICK	COMBINED: Assess sickness	Assess number of complaints of sickness
RB_BEACH	COMBINED: Post at beach	Post announcement at the beach
RB_DIF_AGNCY	COMBINED: Discuss with agencies	Discuss situation with other agencies
RB_INTERNAL	COMBINED: Agency	Provide announcement to agency staff
RB_INTERNET	COMBINED: Post on Internet	Post reopening on the Internet
RB_LOCAL_GOV	COMBINED: Local government	Provide announcement to local government staff
RB_NEWSPAPER	COMBINED: Newspaper article	Publish reopening in local newspaper
RB_PHONE	COMBINED: Provide phone line	Provide results on hotline/water quality information/result phone line
RB_PHYS_ISOL	COMBINED: Remove physical isolation	Remove physical barriers set when closed
RB_RADIO	COMBINED: Radio announcement	Have reopening announced on local radio station
RB_RESAMPLE	COMBINED: Resample	Resample and compare bacterial concentrations with water quality standards to determine whether levels are below

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Code	Name	Description
RB_RESP_PRSN	COMBINED: Notify responsible person	Notify owner/manager/operator/lifeguards of results
RB_STD_RAIN	COMBINED: Standard rain reopening	Reopen after a set number of days following rainfall
RB_TV_ANNCE	COMBINED: TV announcement	Have reopening announced on local TV station
RC_ASES_RISK	CLOSING: Assess risks	Assess risks to potential swimmers
RC_ASES_SICK	CLOSING: Assess sickness	Assess number of complaints of sickness
RC_BEACH	CLOSING: Post at beach	Post announcement at the beach
RC_DIF_AGNCY	CLOSING: Discuss with agencies	Discuss situation with other agencies
RC_INTERNAL	CLOSING: Agency	Provide announcement to agency staff
RC_INTERNET	CLOSING: Post on Internet	Post reopening on the Internet
RC_LOCAL_GOV	CLOSING: Local government	Provide announcement to local government staff
RC_NEWSPAPER	CLOSING: Newspaper article	Publish reopening in local newspaper
RC_PHONE	CLOSING: Provide phone line	Provide results on hotline/water quality information/result phone line
RC_PHYS_ISOL	CLOSING: Remove physical isolation	Remove physical barriers set when closed
RC_RADIO	CLOSING: Radio announcement	Have reopening announced on local radio station
RC_RESAMPLE	CLOSING: Resample	Resample and compare bacterial concentrations with water quality standards to determine whether levels are below

Code	Name	Description
RC_RESP_PRSN	CLOSING: Notify responsible person	Notify owner/manager/operator/lifeguards of results
RC_STD_RAIN	CLOSING: Standard rain reopening	Reopen after a set number of days following rainfall
RC_TV_ANNCE	CLOSING: TV announcement	Have reopening announced on local TV station